CLAIMS

I claim:

1. A hitch for attaching an implement to a motorized vehicle comprising:

(a) a rigid generally U-shaped frame comprising pair of a legs connecting to a cross member thereinbetween, a pair of spaced apart sockets on said frame at a location remote from a free outer end of each one of said legs of said U-shaped frame, said free outer end of each leg being pivotally attachable to the motorized vehicle,

(b) a rigid link selectively adjustably connected to free outer end of each of said legs of said U-shaped frame, and means limiting arcuate movement of said U-shaped frame, and

(c) an extendible and retractable power driven jack unit disposed within said U-shaped frame and connecting at one end to said link and means for connecting the other end to the motorized vehicle.

2. A hitch as defined in claim 1 wherein the sockets are elongate, axially parallel sockets.

3. The hitch as defined in claim 2 wherein a distal end of said legs of the U-shaped frame project beyond said U-shaped frame and wherein the sockets are located in such projecting portion.

4. The hitch as defined in claim 1 wherein the u-shaped frame comprises a pair of parallel conduits open at one end thereof and a cross member interconnecting said conduits adjacent said open ends, said open ends providing said sockets.

5. The hitch as defined in claim 4 wherein the ends of the conduits opposite said open ends have an apertured lug for pivotal attachment to the motorized vehicle.

6. The hitch as defined in claim 1 wherein said rigid link is connected to a lug projecting said rigid frame by a pivot pin and wherein said lug has a series of spaced apart apertures for receiving said pin and thereby being selectively adjustably connectable.

7. The hitch as defined in claim 6 wherein there are a pair of said lugs spaced apart from one another and wherein said link projects between said lugs.

8. The hitch as defined in claim wherein said means limiting said arcuate movement is adjustable to vary the length of arcuate movement.

9. The hitch as defined in claim 1 wherein said means connecting the jack unit to the motorized vehicle comprises a coupler.

10. The hitch as defined in claim 9 wherein said coupler is Z-shaped.

11. The hitch as defined in claim 9 wherein said coupler has a shaft insertable into a socket receiver therefor on the vehicle.

12. A hitch and lift assembly, comprising:

a rigid U-shaped frame comprising a cross member having a pair of elongated members extending therefrom defining a pair of free outer ends and said longitudinal members including a pair of sockets projecting outwardly pass said cross member;

means for pivotally detachable engagement of said free outer ends of said longitudinal members to said vehicle frame;

a floating and lockable cam providing limited arcuate movement of said U-shaped frame;

means for limiting the arcuate movement of said U-shaped frame;

an electrically powered extendible and retractable power driven jack unit connecting at one end to said floating and lockable cam;

a receiver mounted on a vehicle frame;

a coupler connecting said hydraulic jack unit to said receiver;

an adjusting mechanism connecting said hydraulic jack unit to said U-shaped frame.

13. The hitch and lift assembly of claim 12, including means for coarse adjustment for varying the height and tilt positions of an implement.

14. The hitch and lift assembly of claim 13, including wherein said means for coarse adjustment comprises a floating cam link pivotally connected at one end by a pin to a distal end of a piston rod of said hydraulic jack and the other end projects between a pair of mounting plates rigidly anchored to and projecting from said frame cross member, said mounting including a plurality of holes for selectively adjusting the angle and distance of said piston rod pivotally connecting thereto, and having a pin passing through one of said holes and a hole in said floating cam link providing a loose connection providing for pivotal movement about said pin.

15. The hitch and lift assembly of claim 12, including means for fine adjustment for varying the height and tilt positions of an implement.

16. The hitch and lift assembly of claim 15, wherein said fine adjusting mechanism comprises a stud threaded into a vertically threaded hole adjacent an end of said floating cam link and a foot plate on the end of a stud bearing against said cross member, and a hand grip knob provides means to manually turn said

stud providing fine adjustment thereof.

17. The hitch and lift assembly of claim 16, wherein means of locking said floating cam link comprises a lever threaded on said stud for locking said stud in position by binding said stud against said floating cam link at a desired position.

18. The hitch and lift assembly of claim 12, including an implement having pins for cooperative engagement with said sockets of said U-shaped frame.

19. A hitch for attaching an implement to a motorized vehicle comprising

(a) a rigid generally U-shaped frame including a pair of a parallel conduits open at one end thereof and connecting to a cross member interconnecting said conduits adjacent said open ends defining sockets, said parallel conduits having ends opposite said open ends defining a pair of apertured lugs spaced apart from one another for pivotal attachment to a vehicle frame;

(b) means for removably attaching said lugs to said vehicle frame;

(c) a rigid link selectively adjustably connected to and projecting between said lugs projecting from said rigid frame by a pivot pin and wherein said lugs have a series of spaced apart apertures for receiving said pin and thereby being selectively adjustably connectable;

means limiting arcuate movement of said U-shaped frame, and

(d) an extendible and retractable power driven jack unit connecting at one end to said link and a Z-shaped coupler for connecting the other end to the motorized vehicle.

20. A hitch for attaching an implement to a motorized vehicle comprising:

(a) a rigid generally U-shaped frame including a pair of a

parallel conduits open at one end thereof and connecting to a cross member interconnecting said conduits adjacent said open ends defining sockets, said parallel conduits having ends opposite said open ends defining a pair of apertured lugs spaced apart from one another for pivotal attachment to a vehicle frame;

(b) means for removably attaching said lugs to said vehicle frame;

(c) a rigid link selectively adjustably connected to and projecting between said lugs projecting from said rigid frame by a pivot pin and wherein said lugs have a series of spaced apart apertures for receiving said pin and thereby being selectively adjustably connectable;

means limiting arcuate movement of said U-shaped frame, and

(d) an extendible and retractable power driven jack unit connecting at one end to said link and a coupler for connecting the other end to the motorized vehicle.